

Technical Memorandum



To: City of Gonzales – Tom Truszkowski
cc: Rincon Consultants, Inc. – Richard Daulton
From: Wood Rodgers, Inc. – Ravi Narayanan, PE, TE
Date: December 7, 2012
File: J:\Jobs\8531.001 Gonzales Community Center\Traffic\Memos\8531-Gonzales Community Center Traffic Memo 12072012.docx
Job #: 8531.001
RE: New Community Center Development, Gonzales, CA – Traffic and Parking Analysis

INTRODUCTION

This technical memorandum has been prepared to present the results of a traffic and parking analysis completed by Wood Rodgers, Inc. for the proposed Community Center in the City of Gonzales, CA. The City of Gonzales has obtained title to an approximately 3-acre site for the City's first community center. The site is located on the south side of 5th Street just west of Rincon Road adjacent to the Fairview Middle School campus, in the central portion of the City. Per the project site plan (Kasavan Architects, December 3, 2012), the proposed project would include an approximately 29,500 square foot building including space for a library, classrooms, kitchen area, and a multi-purpose room. Project site access is proposed via a public-access driveway on 5th Street.

EXISTING TRANSPORTATION SETTING

The City of Gonzales is located in Monterey County, approximately 16 miles south of the City of Salinas along US 101. The proposed project would be located on 5th Street near several schools of the Gonzales Unified School District. **Figure 1** shows the location of the proposed project site. 5th Street is a two-lane minor arterial for the segment that extends from Alta Street to US 101. East of US 101, 5th Street has a four-lane section to Herold Parkway/Fanoe Road, where 5th Street becomes Johnson Canyon Road. 5th Street forms one of three full-access interchanges with US 101 within the City of Gonzales. On-street parking is provided on the north side of 5th Street near the proposed project site. The posted speed limit on 5th Street along the project frontage is 25 miles per hour.

EXISTING TRAFFIC VOLUMES

Based on the *Gonzales 2010 General Plan* (Adopted January 18, 2011), 5th Street between Alta Street and Rincon Road carries an existing annual average daily traffic (AADT) volume of 3,400 vehicles and operates at Level of Service (LOS) "A" conditions. Wood Rodgers conducted weekday AM and PM peak hour traffic counts on 5th Street in November 2009. The weekday AM and PM peak hour two-way traffic volume on 5th Street west of US 101 was 702 vehicles and 652 vehicles, respectively. The AM peak hour is defined as the highest one hour of traffic flow counted between 7 AM and 9 AM on a typical weekday and the weekday PM peak hour is defined as the highest one hour of traffic flow counted between 4 PM and 6 PM on a typical weekday.

EXISTING PEDESTRIAN, BIKEWAY, AND TRANSIT FACILITIES

Continuous pedestrian sidewalks are provided on both sides of 5th Street in the project area, with a striped crosswalk provided to cross 5th Street at the existing Gabilan Court intersection. The crosswalk is automated with flashing lights in the pavement and audible sound. There is a Class II

bike lane striped on 5th Street along the project frontage that extends from Rincon Road to Alta Street. Based on counts collected in November 2009, there were 177 pedestrians during the weekday AM peak hour and 76 pedestrians during the weekday PM peak hour traveling along 5th Street west of US 101, with a majority of pedestrians being students. In addition, there were 5 bicyclists in the AM peak hour and 8 bicyclists in the PM peak hour traveling along 5th Street west of US 101.

Monterey-Salinas Transit (MST) Route 23 currently provides approximately hourly service from 6 AM to 8 PM on weekdays and 9 AM to 8 PM on weekends. Route 23 provides daily service between the Cities of Salinas and King City, with bus stops located on both sides of 5th Street in the City of Gonzales just west of the proposed project site. MST also provides on-call service in the City of Gonzales.

PROJECT ANALYSIS

The proposed Gonzales Community Center (the “project”) envisions development of an approximately 29,500 square-foot building, including space for a library, classrooms, kitchen area, and a multi-purpose room. Up to 191 on-site parking spaces are also proposed. **Figure 2** shows the proposed project site plan (dated December 3, 2012). Based on the site plan, project site access is proposed via a public-access driveway on 5th Street on the northeast side of the project parcel.

The Community Center site would be located immediately east of the joint-use gymnasium on the Fairview Middle School campus, which was constructed in 2010 with funding from the Gonzales Unified School District and the City of Gonzales.

PROJECT TRIP GENERATION

In 2009, the City acquired the three-acre site for the proposed Community Center project, on the site of a former Monterey County Housing Authority housing complex. The housing complex and underground utilities were demolished and the site now contains a cul-de-sac roadway, sidewalk and curb/gutters, and ornamental trees lining the existing Gabilan Court. The site’s location within the central part of the City and adjacent to Fairview Middle School makes it ideal for a Community Center.

The former Gabilan Vista Family Public Housing located on the proposed project site included 20 housing units that lined both sides of Gabilan Court. The project trip generation estimate took into consideration the previous residential uses to determine the net “new” trips generated by the proposed Community Center. *Trip Generation, 8th Edition* (Institute of Transportation Engineers, 2008) includes a Recreational Community Center trip generation rate for the proposed Community Center. **Table 1** summarizes the estimated trip generation rates used for both the previous residential uses and the proposed Community Center.

Table 1. Trip Generation Rates

Land Use Category	ITE Use Code	Units ¹	Daily Trip Rate/Unit	Weekday AM Peak Hour Trip Rate/Unit			Weekday PM Peak Hour Trip Rate/Unit		
				Total	In	Out	Total	In	Out
Residential Condominium/Townhouse	230	DU	5.8	0.44	17%	83%	0.52	67%	33%
Recreational Community Center	495	KSF	9.1*	1.62	61%	39%	1.45	37%	63%

Notes:

Trip generation rates based on average rates in *ITE's Trip Generation (8th Edition, 2008)*.

¹ DU = Dwelling Units, KSF = 1,000 Square Feet

* Recreational Community Center daily trip rate based on Saturday daily trip generation rate due to lack of data for weekdays; however all other trip rates presented in the table are based on typical weekday conditions.

Table 2 summarizes the estimated “new” Daily, AM and PM peak hour trip generation of the proposed Community Center after subtracting the previous residential uses based on the trip rates from **Table 1**.

Table 2. Gonzales Community Center Project Trip Generation

Land Use	Units ¹	Quantity (KSF)	Daily Trips	Weekday AM Peak Hour Trips			Weekday PM Peak Hour Trips		
				Total	In	Out	Total	In	Out
<i>Previous Project Site Trip Generation</i>									
Residential Condominium/Townhouse	DU	20	116	9	2	7	10	7	3
<i>Proposed Project Site Trip Generation</i>									
Recreational Community Center	KSF	29.5	268	48	29	19	43	16	27
<i>Net “New” Project Trips</i>			152	39	27	12	33	9	24
Notes: Trip generation rates based on average rates in ITE’s <i>Trip Generation</i> (8 th Edition, 2008). ¹ DU = Dwelling Units, KSF = 1,000 Square Feet									

As shown in **Table 2**, the proposed Community Center project is anticipated to generate 152 “new” daily trips, 39 “new” weekday AM peak hour trips, and 33 “new” weekday PM peak hour trips. Based on existing traffic volumes on 5th Street, the proposed Community Center “new” trips would represent less than 5 percent of daily traffic volumes, less than 6 percent of AM peak hour traffic volumes, and less than 5 percent of PM peak hour traffic volumes on 5th Street.

PROJECT SITE ACCESS

Per the project site plan dated December 3, 2012 (see **Figure 2**), the existing Gabilan Court would be removed along with its existing intersection on 5th Street and replaced with a new project access driveway and intersection on 5th Street. The following driveway would provide access to/from the proposed Community Center:

- The proposed project would be served by a single public-access driveway on 5th Street. The driveway would be located approximately 150 feet west of Rincon Road and approximately 220 feet east of the existing Day Care driveway. The proposed driveway intersection with 5th Street would permit full-access (i.e. allow all turning movements in and out of the site). The driveway would have a 24-foot wide throat, allowing for one 12-foot travel lane in each travel direction.

There is currently a recreational field on the north side of 5th Street with no direct access, resulting in no conflicting movements with the proposed Community Center driveway. The proposed project driveway location is adequate and is not anticipated to result in adverse traffic operations based on proximity to other driveways and roadways.

Driveway Traffic Control

The existing Gabilan Court, which is located on the proposed project site, intersects 5th Street at a stop-sign controlled intersection. This intersection was formerly served by an all-way-stop control. As part of the proposed project, the pedestrian crosswalk would be relocated approximately 100 feet to the east, to the proposed new project driveway. The new 5th Street/Project Access Driveway intersection would be controlled by an all-way-stop. Based on existing traffic volumes on 5th Street and the proposed project trip generation, the new Community Center intersection on 5th Street is anticipated to operate acceptably based on the City of Gonzales’ LOS “C” policy (2010 *General Plan* Policy CIR-1.1).

Based on existing travel patterns on 5th Street, it is estimated that approximately 14 vehicles during the AM peak hour and 8 vehicles during the PM peak hour would make the westbound left-turn from 5th Street into the project site. This movement would be made from a shared lane with through traffic. Based on existing traffic volumes, it is anticipated that the maximum westbound left-turn vehicle queue would be 2 vehicles (50 feet) in the AM peak hour and 1 vehicle (25 feet) in the PM peak hour¹. These vehicle queues are not anticipated to adversely affect traffic operations along 5th Street.

Based on existing travel patterns on 5th Street, it is estimated that approximately 15 vehicles during the AM peak hour and 8 vehicles during the PM peak hour would make the eastbound right-turn from 5th Street into the project site. A right-turn deceleration taper may be considered at driveways on arterial streets when ingressing volumes are between 10 and 50 vehicles per hour. Based on the 25 mile per hour posted speed limit on 5th Street, a right-turn deceleration taper is not required at the proposed project driveway intersection.

Driveway Throat Depth Evaluation

The minimum required throat depth at the proposed project driveway was estimated based on the AM and PM peak hour turning movements. Adequate storage at the proposed project driveway between 5th Street and the first internal site aisle is needed to ensure that outbound vehicles do not block the first internal aisle. The proposed project site plan includes 50 feet of driveway throat depth that can accommodate up to 2 vehicles before the first on-site parking space. The anticipated maximum vehicle for outbound vehicles is 2 vehicles during the AM and PM peak hour periods, therefore the proposed driveway throat depth is adequate.

Emergency Access

The proposed project would be served by a single general public-access driveway on 5th Street. The proposed Community Center building is set back approximately 250 feet from the south edge of 5th Street traveled way.

The City and the Gonzales School District have discussed the proposed project, and have conceptually agreed that a pedestrian walk-through connection and a separate (locked) gated drive-through connection connecting between the proposed Community Center site and the adjacent existing joint-use gym/daycare site will be provided. The proposed updated site plan (dated December 3, 2012) shows a 20-foot wide emergency gate at the south end of the project site's western boundary, connecting the project site with the adjacent Joint Use Gym site at Fairview Middle School located directly to the west of the Community Center as shown on **Figure 2**. Furthermore, the updated site plan shows two 8-foot wide pedestrian gates on the western boundary of the project, allowing pedestrian access between the project site and the adjacent daycare/gym site. With the proposed emergency access and pedestrian connections as shown in the updated site (December 3, 2012), the project is not anticipated to cause any significant emergency access impacts.

PEDESTRIAN, BIKEWAY, AND TRANSIT FACILITIES

The proposed project, being a Recreational Community Center, would likely result in some increase in transit, bicycle, and pedestrian use in the project vicinity. There are existing pedestrian sidewalks on both sides of 5th Street, and Class II bike lanes are provided along both sides of 5th Street in the project site vicinity. The existing MST bus stop on 5th Street would also provide transit service to the proposed project site.

¹ Maximum vehicle queues are based on November 2001 ITE Journal Methodology and are rounded up to the nearest 25 feet.

PARKING ANALYSIS

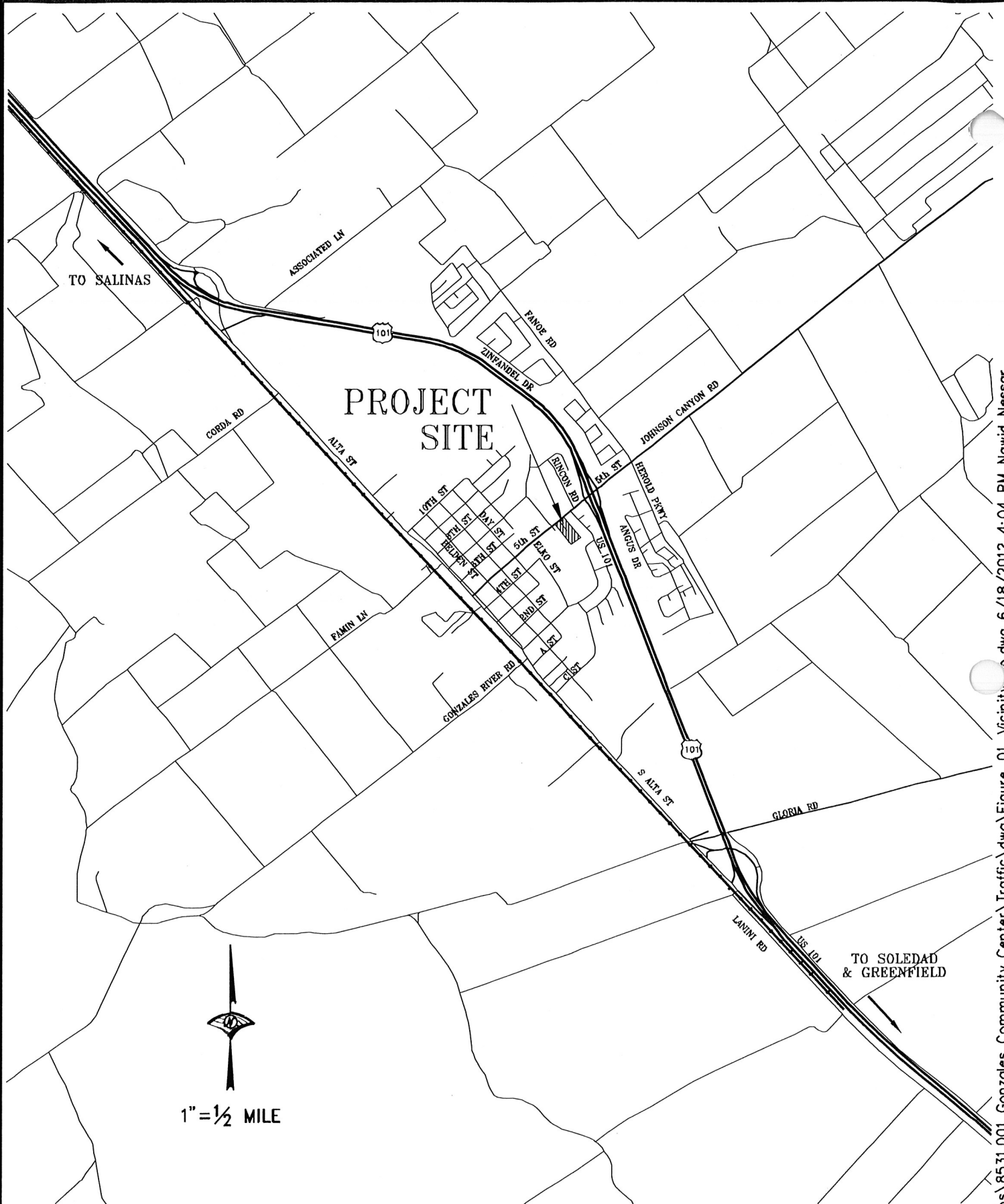
The project site plan (dated December 3, 2012) includes 191 on-site parking spaces. *Parking Generation, 4th Edition* (ITE, 2010) identifies the peak weekday parking period between 6:00 PM and 8:00 PM for Recreational Community Center uses (Land Use Code 495). The average weekday peak period parking demand is 3.2 vehicles per 1,000 square feet of gross floor area. Based on the site plan, the proposed 29,500 square foot building would generate a peak weekday parking demand of 95 parking spaces. Therefore, it is projected that the on-site parking supply as proposed by the project site plan is adequate, and project parking impacts are not considered significant.

In addition to the proposed Community Center, it is anticipated that excess parking spaces would be utilized by the adjacent Joint-Use Gym at Fairview Middle School. For special events and other high parking demand times, it is anticipated that the Community Center could generate a demand for 149 parking spaces based on the 85th percentile parking demand from *Parking Generation*. Even during the highest parking demand for special events at the Community Center, it is anticipated that over 40 parking spaces would still be available for use by the Joint-Use Gym.

The proposed on-site parking drive aisles are proposed to be 24-foot wide, which would facilitate movements by most vehicles in and out of parking spaces.

GONZALES 2010 GENERAL PLAN

Based on review of the *Gonzales 2010 General Plan*, the project site is designated as Public/Quasi Public use, which is consistent with the proposed project use. As such, no cumulative traffic analysis is considered necessary for this project. The *Gonzales 2010 General Plan* estimates that future traffic on 5th Street between Alta Street and Rincon Road will be approximately 5,800 vehicles per day under Urban Growth Boundary Buildout conditions. This section of 5th Street is planned to be maintained as the existing two-lane Minor Arterial and operate at LOS A under future conditions. The proposed project would add 153 “new” daily trips to 5th Street, which were included as part of the Gonzales 2010 General Plan analysis. The “new” daily trips would represent less than 3 percent of future daily traffic volumes on 5th Street.



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GONZALES COMMUNITY CENTER, GONZALES, CA

FIGURE

VICINITY MAP

WOOD RODGERS
 DEVELOPING INNOVATIVE DESIGN SOLUTIONS
 3301 C ST, Bldg. 100-B Tel 916.341.7780
 Sacramento, CA 95836 Fax 916.341.7787

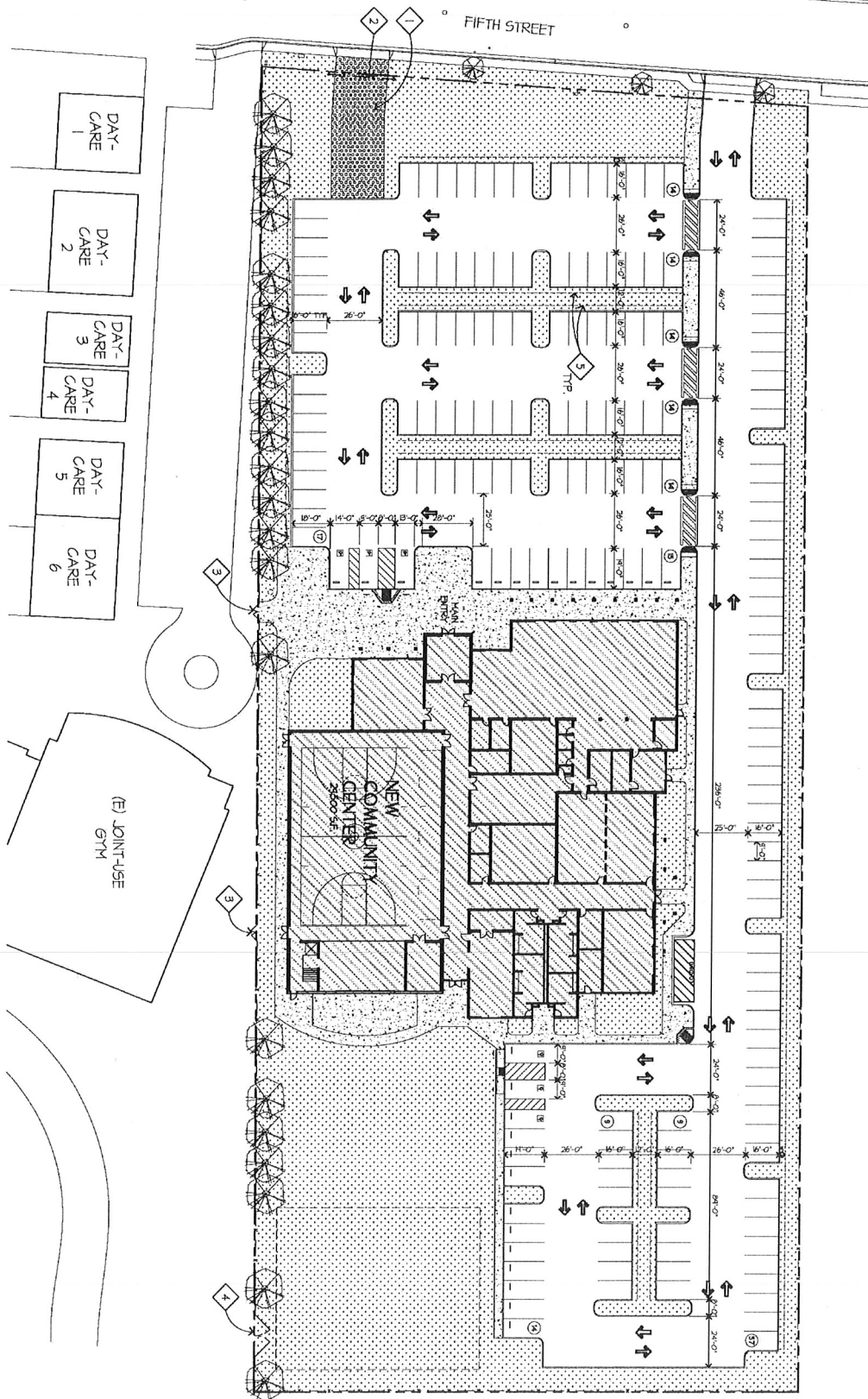


N.T.S.

SITE PLAN PROVIDED BY
KASAVAN ARCHITECTS, DATED 12/03/2012.

GONZALES COMMUNITY CENTER, GONZALES, CA

FIGURE 2



SITE PLAN

WOOD RODGERS
DEVELOPING INNOVATIVE DESIGN SOLUTIONS
3301 C St, Bldg. 100-5 Tel 916.341.7760
Sacramento, CA 95818 Fax 916.341.7767